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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/246,578	02/08/1999	ROBERT J. DALIAS	82771.P269	6329

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EXAMINER

PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 07/28/2004

#14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/246,578

Applicant(s)

DALIAS ET AL.

Examiner

Bob A. Phunkulh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This communication is in response to applicant's 05/06/2004 amendment(s)/response(s) in the application of **Dallas et al.** for "**SS7-INTERNET GATEWAY ACCESS SIGNALING PROTOCOL**" filed 02/05/1999. The amendments/response to the claims have been entered. No claims have been canceled. No claims have been added. Claims 1-20 are now pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuner et al. (US 6,084,956), hereinafter Tuner, in view of Boese et al. (US 5,084,816), hereinafter Boese.

Regarding claims 1-11, Tuner discloses in a network architecture comprising a telephone switch (PSTN switch 50, figure 4), an access server (server 59, figure 4) coupled to a data network (64, figure 4) and the telephone switch via a telecommunications medium (link 56, figure 4) to transmit user information between the telephone switch and the data network, and a gateway (internetwork function 54 and network controller, figure 4) coupled to the access server and the telephone switch via an out-of-band communication medium (SS7 network 52, figure 4) to transmit signaling

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information between the telephone switch and the access server. Tuner further discloses sending control and response messages between the Interworking node and the NSA (see figure 6).

Tuner fails to explicitly disclose sending a status message from the gateway to the NAS and a response message from the NAS to the gateway, where the status message indicates the transmitter is operational and indicates the capabilities of the transmitter, and the status acknowledge message indicates the messages is received.

Boeses, on the other hand, teaches that transmitting link status signal units (LSSUs) or message signal unit (MSU) messages between the at least two nodes (STP, or SSP or SCP) for flow control (see col. 15 lines 50-68) or configuration of the network or alignment of the two nodes (see col. 17 line 47 to col. 18 line 55). When a transmitter transmits the LSSU or MSU message, the receiver must transmits the acknowledge receipt; where the status message indicates the transmit is operational and indicates the capabilities of the transmitter, and the status acknowledge message indicates the message is received (see col. 17 line 47 to col. 18 line 55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to transmits LSSU or MSU signaling messages of Boeses in the link between the access server and the gateway (STP 31 and ISCP 40) of Turner to performs either flow control when there is congestion in the link or gateway or the access server; or network configuration when there are changes in the network; or re-alignment between the access server and the gateway (STP 31 and ISCP 40) when

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there is a failure in either one or to indicate whether the interface 183 can receive user information from the PSTN.

Regarding claims 12-13, Tuner discloses in a network architecture comprising a telephone switch (PSTN switch 50, figure 4), an access server (server 59, figure 4) coupled to a data network (64, figure 4) and the telephone switch via a telecommunications medium (link 56, figure 4) to transmit user information between the telephone switch and the data network, and a gateway (internetwork function 54 and network controller, figure 4) coupled to the access server and the telephone switch via an out-of-band communication medium (SS7 network 52, figure 4) to transmit signaling information between the telephone switch and the access server. Tuner further discloses sending control and response messages between the Interworking node and the NSA (see figure 6).

Tuner fails to explicitly disclose sending a status message from the gateway to the NAS and a continuity response message from the NAS to the gateway.

Boeses, on the other hand, teaches that transmitting link status signal units (LSSUs) or message signal unit (MSU) messages between the at least two nodes (STP, or SSP or SCP) for flow control (see col. 15 lines 50-68) or configuration of the network or alignment of the two nodes (see col. 17 line 47 to col. 18 line 55). When a transmitter transmits the LSSU or MSU message, the receiver must transmit the acknowledge receipt.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to transmits LSSU or MSU signaling messages of Boeses in the link between the access server and the gateway (STP 31 and ISCP 40) of Turner to performs either flow control when there is congestion in the link or gateway or the access server; or network configuration when there are changes in the network; or re-alignment between the access server and the gateway (STP 31 and ISCP 40) when there is a failure in either one or to indicate whether the interface 183 can receive user information from the PSTN.

Regarding claims 14-19, Tuner discloses in a network architecture comprising a telephone switch (PSTN switch 50, figure 4), an access server (server 59, figure 4) coupled to a data network (64, figure 4) and the telephone switch via a telecommunications medium (link 56, figure 4) to transmit user information between the telephone switch and the data network, and a gateway (internetwork function 54 and network controller, figure 4) coupled to the access server and the telephone switch via an out-out-band communication medium (SS7 network 52, figure 4) to transmit signaling information between the telephone switch and the access server. Tuner further discloses sending control and response messages between the Interworking node and the NSA (see figure 6).

Tuner fails to explicitly discloses sending a status message from the gateway to the NAS and a response message from the NAS to the gateway, where the status

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message indicates the transmitter is operational and the capabilities of the transmitter, and the status acknowledge message indicates the message is received.

Boeses, on the other hand, teaches that transmitting link status signal units (LSSUs) or message signal unit (MSU) messages between the at least two nodes (STP, or SSP or SCP) for flow control (see col. 15 lines 50-68) or configuration of the network or alignment of the two nodes (see col. 17 line 47 to col. 18 line 55). When a transmitter transmits the LSSU or MSU message, the receiver must transmits the acknowledge receipt; where the status message indicates the transmit is operational and indicates the capabilities of the transmitter, and the status acknowledge message indicates the message is received (see col. 17 line 47 to col. 18 line 55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to transmits LSSU or MSU signaling messages of Boeses in the link between the access server and the gateway (STP 31 and ISCP 40) of Turner to performs either flow control when there is congestion in the link or gateway or the access server; or network configuration when there are changes in the network; or re-alignment between the access server and the gateway (STP 31 and ISCP 40) when there is a failure in either one or to indicate whether the interface 183 can receive user information from the PSTN.

Regarding claim 20, Tuner discloses in a network architecture comprising a telephone switch (PSTN switch 50, figure 4), an access server (server 59, figure 4) coupled to a data network (64, figure 4) and the telephone switch via a

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telecommunications medium (link 56, figure 4) to transmit user information between the telephone switch and the data network, and a gateway (internetwork function 54 and network controller, figure 4) coupled to the access server and the telephone switch via an out-of-band communication medium (SS7 network 52, figure 4) to transmit signaling information between the telephone switch and the access server. Tuner further discloses sending control and response messages between the Interworking node and the NSA (see figure 6).

Tuner fails to explicitly disclose a computer readable program means for sending a status message from the gateway to the NAS and a response message from the NAS to the gateway.

Boeses, on the other hand, teaches that transmitting link status signal units (LSSUs) or message signal unit (MSU) messages between the at least two nodes (STP, or SSP or SCP) for flow control (see col. 15 lines 50-68) or configuration of the network or alignment of the two nodes (see col. 17 line 47 to col. 18 line 55). When a transmitter transmits the LSSU or MSU message, the receiver must transmit the acknowledge receipt; where the status message indicates the transmit is operational and indicates the capabilities of the transmitter, and the status acknowledge message indicates the message is received (see col. 17 line 47 to col. 18 line 55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to provide a computer readable program means for transmitting LSSU or MSU signaling messages of Boeses in the link between the access server and the gateway (STP 31 and ISCP 40) of Turner to perform either flow

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control when there is congestion in the link or gateway or the access server; or network configuration when there are changes in the network; or re-alignment between the access server and the gateway (STP 31 and ISCP 40) when there is a failure in either one or to indicate whether the interface 183 can receive user information from the PSTN.

Response to Arguments

Applicant's arguments filed 5/ have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine the references is taught in col. 16 lines 45-58; col. 18 lines 1-15 of Boese.

In response to the applicant's argument in page 8 paragraph 2, Boese discloses transmitting link status signal units (LSSUs) or message signal unit (MSU) messages between the at least two nodes (STP, or SSP or SCP) for flow control (see col. 15 lines 50-68) or configuration of the network or alignment of the two nodes (see col. 17 line 47 to col. 18 line 55). When a transmitter transmits the LSSU or MSU message, the

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receiver must transmits the acknowledge receipt; where the status message indicates the transmit is operational and indicates the capabilities of the transmitter, and the status acknowledge message indicates the message is received (see col. 17 line 47 to col. 18 line 55). Also, the Turner discloses transmitting CCS7 control signaling message between the interworking node 86 and the NAS 88. The teaching of Boese could be use for transmission of control messages between two signaling points i.e. from the NAS to the interworking node (see the above for the motivation).

Conclusion

Any response to this action should be mailed to:

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or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

Hand-delivered responses should be brought to Crystal Park II, 2021

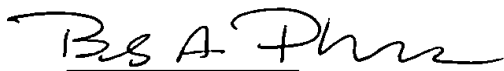
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(703) 308-8251**. The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Douglas W. Olms**, can be reach on **(703) 305-4703**. The fax phone number for this group is **(703) 872-9314**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bob A. Phunkulh



TC 2600
Art Unit 2661
July 19, 2004



DOUGLAS OLMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600